Appln. No.: 10/750,131

Amendment Dated March 19, 2008

Reply to Office Action of November 19, 2007

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

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Listing of Claims:

- 1. (Previously Presented) An endoluminal implant comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area.
- 2. (Previously Presented) The implant of claim 1, wherein the at least one filament comprises a step-change between the first region and the second region.
- 3. (Previously Presented) The implant of claim 1, wherein all of the plurality of continuous filaments comprise a step-change between each first region and each second region.
- 4. (Previously Presented) The implant of claim 1, wherein the at least one filament comprises a tapered filament.
- 5. (Previously Presented) The implant of claim 1, wherein all of the plurality of continuous filaments comprise tapered filaments.
- 6. (Previously Presented) The implant of claim 1, wherein the implant comprises an end having atraumatic end windings.
- 7. (Previously Presented) The implant of claim 1, wherein the at least one filament comprises a circular cross-section.
- 8. (Previously Presented) The implant of claim 1, wherein the at least one filament comprises a non-round cross-section.

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9. (Previously Presented) The implant of claim 1, wherein the implant tapers from a first end having a first diameter to a second end having a second diameter smaller than the first diameter.

- 10. (Previously Presented) The implant of claim 1, wherein the at least one filament further comprises a third region having a cross-sectional area intermediate the first and second cross-sectional areas.
- 11. (Previously Presented) The implant of claim 1, wherein a first end of the implant has a first diameter and a second end of the implant has a second diameter smaller than the first diameter.
- 12. (Previously Presented) The implant of claim 11, wherein the implant comprises the first region of the filament having the first cross-sectional area at the first end of the implant and the second region of the filament having the second cross-sectional area at the second end of the implant.
- 13. (Previously Presented) The implant of claim 12, wherein the implant comprises an intermediate portion having a third diameter intermediate the first and second diameters, and the intermediate portion comprises a third region of the at least one filament having a third cross-sectional area intermediate the first and second cross-sectional areas.
- 14. (Previously Presented) The implant of claim 1 wherein the implant comprises a first portion and a second portion, wherein the second portion is more flexible than the first portion and comprises the second region of the at least one filament having the second cross-sectional area.
- 15. (Previously Presented) The implant of claim 1 wherein the filaments comprise wire.
- 16. (Previously Presented) The implant of claim 15 wherein the wire comprises one of: nitinol or stainless steel.
- 17. (Previously Presented) The implant of claim 1 wherein the filaments comprise polymeric material.

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18. (Previously Presented) The implant of claim 1 wherein the implant comprises a radially compressed configuration for introduction into a lumen and a radially expanded configuration for deployment within the lumen.

- 19. (Previously Presented) The implant of claim 18 wherein the implant is expandable between the radially compressed configuration and the radially expanded configuration by one of: balloon expansion, self-expansion via spring elasticity, or self-expansion via a thermally or stress-induced return of a pre-conditioned memory material.
- 20. (Previously Presented) The implant of claim 1 wherein the implant comprises one of: a 1:1 single filament braiding ratio, a 2:2 single filament braiding ratio, or a 1:1 paired filament braiding ratio.
- 21. (Previously Presented) The implant of claim 1 further comprising a body and a plurality of legs, wherein at least a first leg portion of each leg comprises a discrete plurality of continuous filaments braided together and at least a first body portion of the body comprises at least one of said continuous filaments from each discrete plurality of continuous filaments braided together.
- 22. (Previously Presented) A method for treating a human being, the method comprising the step of implanting within a lumen of the human being an endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area.
- 23. (Previously Presented) A process for constructing a braided, branched stent having a body and a plurality of legs, each leg comprising a discrete plurality of continuous filaments, the process comprising the steps of:
- a) braiding each plurality of continuous filaments to individually form at least first leg portions of each of the legs; and
- b) braiding at least one filament from each plurality of continuous filaments together to form a first body portion of the body;

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wherein at least one braiding step comprises braiding the stent using at least one tapered filament comprising at least one first region having a first, relatively larger cross-sectional area and at least one second region having a second, relatively smaller cross-sectional area.

- 24. (Previously Presented) The process of claim 23 comprising braiding each braided portion of each leg using one of the second regions of the tapered filament and braiding the braided portion of the body using the first region of the tapered filament.
- 25. (Previously Presented) The process of claim 23 comprising braiding each braided portion of each leg using one of the first regions of the tapered filament and braiding the braided portion of the body using the second region of the tapered filament.
- 26. (Previously Presented) The process of claim 23 comprising prior to steps (a) and (b), winding each tapered filament between two bobbins such that a first end of the filament is wound on a first bobbin and a second end of the filament is wound on a second bobbin, and positioning a midpoint of the filament on the mandrel to form an apex at an end of the stent.
- 27. (Previously Presented) The process of claim 26, wherein the first end is located within one of the second regions having the second, relatively smaller cross-sectional area and the second end is located within another of the second regions and the midpoint of the filament is located within the first region having the first, relatively larger cross-sectional area.
- 28. (Previously Presented) The process of claim 26, wherein the first end is located within one of the first regions having the first, relatively larger cross-sectional area and the second end is located within another of the first regions and the midpoint of the filament is located within the second region having the second, relatively smaller cross-sectional area.
- 29. (Previously Presented) An endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a first cross-sectional area and at least one second region having a second cross-sectional area, wherein the first cross-sectional area is larger than the second cross-sectional area, wherein the endoluminal device comprises a radially compressed configuration for

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introduction into a lumen and a radially expanded configuration for implantation within the lumen.

- 30. (Currently Amended) The endoluminal <u>device implant</u> according to claim 1, wherein the <u>endoluminal implantdevice</u> comprises a stent.
- 31. (Currently Amended) An endoluminal device comprising a plurality of continuous filaments braided together, at least one filament comprising at least one first region having a round-circular first cross-section with a first diameter and at least one second region having a round-circular second cross-section with a second diameter, wherein the first cross-section is larger than the second cross-section.
- 32. (New) The endoluminal implant according to claim 1, wherein the endoluminal implant comprises a radially compressed configuration for introduction into a lumen and a radially expanded configuration for implantation within the lumen.